#Import libraries

library(readr)

#Clear Data

rm(list=ls())

GSPC <- read\_csv("C:/Users/Panth/Desktop/Spring 2019/Data to Models/Project/Fred\_Project/Data/GSPC.csv")

Monthly\_data<- read\_excel("C:/Users/Panth/Desktop/Spring 2019/Data to Models/Project/Fred\_Project/Data/5919.xls", sheet = "Monthly")

Quarterly\_data<- read\_excel("C:/Users/Panth/Desktop/Spring 2019/Data to Models/Project/Fred\_Project/Data/5919.xls", sheet = "Quarterly")

Weekly\_data<- read\_excel("C:/Users/Panth/Desktop/Spring 2019/Data to Models/Project/Fred\_Project/Data/5919.xls", sheet = "Weekly,\_Ending\_Saturday")

####Convert Quarterly to Monthly####

monthly\_seq = seq(Quarterly\_data$DATE[1], tail(Quarterly\_data$DATE,1), by="month")

Quarterly\_data = transform(Quarterly\_data, PCECC96 = PCECC96/3)

monthly\_consumer\_expend = Quarterly\_data[c("DATE", "PCECC96")]

monthly\_consumer\_expend\_interpol\_df = data.frame(DATE=monthly\_seq, monthly\_consumer\_expend\_interpol=spline(monthly\_consumer\_expend, method = "fmm", xout=monthly\_seq)$y)

####Convert Weekly to Monthly####

####Add Data to Monthly####

Monthly\_data['Consumer\_Expend']= monthly\_consumer\_expend\_interpol\_df['monthly\_consumer\_expend\_interpol']

Monthly\_data['SP\_Close'] = GSPC['SP\_Close']